

**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Docket No: Q68279

Hiroyuki TOMOIKE

Application No.: 10/058,805

Group Art Unit: 2144

Confirmation No.: 4726

Examiner: Thanh T. NGUYEN

Filed: January 30, 2002

For: MOBILE COMMUNICATION SYSTEM AND DATA TRANSFERRING METHOD  
FOR USE WITH MOBILE COMMUNICATION SYSTEM

**SUPPLEMENTAL APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

Supplemental to the Appeal Brief Under 37 C.F.R. § 41.37 submitted on December 31,  
2007 in response to the Final Office Action of May 4, 2007, Appellant submits the following in  
accordance with the provisions of 37 C.F.R. § 41.37:

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**I. REAL PARTY IN INTEREST**

The real party in interest is NEC CORPORATION, by virtue of an assignment executed by inventor Hiroyuki TOMOIKE on January 22, 2002, filed at the U.S. Patent and Trademark Office on January 30, 2002, and recorded by the Assignment Branch of the U.S. Patent and Trademark Office on January 30, 2002 (at Reel 012547, Frame 0130).

## **II. RELATED APPEALS AND INTERFERENCES**

Upon information and belief, there are not other prior or pending appeals, interferences or judicial proceedings known to Appellant's representative or the Assignee that may be related to, be directly affected by, or have a bearing on the Board's decision on Appeal.

### **III. STATUS OF CLAIMS**

Claims 1-7 are all of the pending claims in the present Application.

Claims 1-7 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Martin, Jr. et al.(U.S. Patent 6,610,105) in view of Chern et al. (U.S. Patent No. 6,381,465).

All of the claims pending in the present application are set forth in their entirety in the Appendix below.

#### **IV. STATUS OF AMENDMENTS**

Claims 1-7 have not been amended subsequent to the Final Office Action of May 4, 2007. The claims, thus, stand as presented before the Final Office Action of May 4, 2007.

## **V. SUMMARY OF THE CLAIMED SUBJECT MATTER**

Appellant's invention is related to a mobile communication system and a data transferring method for use with the mobile communication system. Specifically, the present invention is directed to a mobile communication system that allows temporary use of wireless line resources of other mobile stations, as well as a local mobile station, so as to transfer data in a public mobile data communication to improve the throughput of data transfer from the view point of the user. (See page 4, ll. 4-10).

In this regard, as recited in independent claim 1, a mobile communication system includes a portable information terminal unit, a plurality of mobile stations capable of participating simultaneously in communication with said portable information terminal unit. (See page 6, ll. 12-22 and page 4, ll. 4-10). These mobile stations are stations whose location is not necessarily fixed, i.e., mobile stations which are capable of being moved. In one exemplary embodiment of the present invention, the mobile stations may use Bluetooth for communicating with the portable information terminal unit. (See pages 20-21, ll. 22-4). As a result, the mobile stations can be moved freely within the range of the Bluetooth link.

The mobile communication system also includes a packet mobile switching center which is adapted to communicate with said plurality of mobile stations through a radio access network, a packet mobile gateway switching center which is adapted to communicate with said packet mobile switching center through a mobile data network, and a content server which is adapted to communicate with said packet mobile gateway switching center through the Internet. (See page 6, ll. 12-22 and page 7, ll. 19-24).

With regard to the portable information terminal unit of the system described above, the portable information terminal unit is adapted to download or upload data from or to said content server through the plurality of mobile stations, wherein the data is divided into a plurality of pieces and each of the plurality of mobile stations uploads or downloads only a portion of the

plurality of pieces of the data. (See page 16, ll. 22-24 and page 17, ll. 21-24). In other words, according to one exemplary embodiment of the present invention, if data being stored on the server needs to be uploaded to the portable information terminal unit, the chosen data would be divided into a plurality of pieces, and **each mobile station**, making up the plurality of mobile stations, **only** uploads a portion of the plurality of pieces of data. (See, e.g., FIG. 1).

**Independent Claim 2:** This claim is similar in scope to claim 1, which is described above, but is directed to the portable information terminal unit. The specification and line number, supporting the elements of this claim, can be found recited above with respect to claim 1. (See FIG. 1, element 1, and the corresponding disclosure at, for example, page 7, lines 7-9).

**Independent Claim 3:** This claim is similar in scope to claim 1, which is described above, but further defines the plurality of mobile stations as a first mobile station, capable of participating simultaneously with at least a second mobile station, in communication with a portable information terminal. Similar to the limitation recited in claim 1, the portable information terminal unit is adapted to download or upload data from or to said content server through at least said first and second mobile stations, wherein the data is divided into a plurality of pieces and each of the first and second mobile stations uploads or downloads only a portion of the plurality of pieces of the data. (See page 16, lines 22-24, and page 17, lines 21-24; see, also e.g., FIG. 1, showing a plurality of mobile stations).

**Independent Claim 4:** This claim is similar in scope to claim 1, which is described above, but is directed to a packet mobile switching center which is adapted to communicate with a plurality of mobile stations through a radio access network, wherein, *inter alia*, the plurality of mobile stations are capable of participating simultaneously in communication with a portable information terminal unit, and the portable information terminal unit is adapted to download or upload data from or to said content server through the plurality of mobile stations, wherein the data is divided into a plurality of pieces and each of the plurality of mobile stations uploads or

downloads only a portion of the plurality of pieces of the data. (See page 16, lines 22-24, and page 17, lines 21-24; see also page 4, lines 4-10).

**Independent Claim 5:** This claim is similar in scope to claim 1, which is described above, but is directed to a packet mobile gateway switching center which is adapted to communicate with a packet mobile switching center. (See FIG. 1 and page 8, ll. 4-6).

**Independent Claim 6:** This claim is similar in scope to claim 1, which is described above, but is directed to a contents server which is adapted to communicate with a packet mobile gateway switching center through the Internet. (See FIG. 1, element 10, and the corresponding description at, for example, page 7, line 4). The specification and line number, supporting the elements of this claim, can be found recited above with respect to claim 1.

**Independent Claim 7:** This claim is a method claim which corresponds substantially to claim 1. The specification and line number, supporting the elements of this claim, can be found recited above with respect to claim 1.



## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

There is only one issue for appeal. The single issue is whether claims 1-7 are improperly rejected under 35 U.S.C. § 103(a) as being unpatentable over Martin, Jr. et al. (U.S. Patent 6,610,105) in view of Chern et al. (U.S. Patent No. 6,381,465).

## **VII. ARGUMENT**

### ***Claim Rejections under 35 U.S.C. § 103(a)***

Claims 1-7 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Martin, Jr. et al.(U.S. Patent 6,610,105) in view of Chern et al. (U.S. Patent No. 6,381,465). Appellant respectfully disagrees.

With regard to claim 1, neither Martin or Chern, alone or in combination, teach, or even suggest, at least “a portable information terminal unit; [and] **a plurality of mobile stations** capable of participating simultaneously in communication with said portable information terminal unit.” In one exemplary embodiment of the present invention, the mobile stations may use Bluetooth for communicating with the portable information terminal unit. (See pages 20-21, ll. 22-4). As a result, the mobile stations can be moved freely within the range of the Bluetooth link.

Initially, Appellant notes that the Examiner has not given the proper weight to the word “**mobile**” in the “plurality of **mobile** stations” limitation of claim 1. It is well known that, when examining the claims of an application, “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.” MPEP § 2143.03; see also *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). Additionally, “[w]hen evaluating claims for obviousness under 35 U.S.C. § 103, **all the imitations of the claims must be considered and given weight**. MPEP § 2143.03; see also *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983) *aff’d mem.* 738 F.2d 453 (Fed. Cir. 1984).

In the Office Action of May 4, 2007, the Examiner asserted that the “plurality of **base stations**,” making up the network 140 in Chern, correspond to the “plurality of **mobile stations**” of claim 1. This is simply not a reasonable interpretation.

Initially, Appellant notes that the present Application includes disclosure directed to **both** mobile stations **and** base stations. Specifically, the present Application discloses that “the RAN

3 is a wireless line controlling device for relaying wireless communications of the MS 21 [(mobile station 21)] to MS 2n. **The RAN 3 is composed of a base station (BS)** and an RNC (Radio Network Controller).” (See page 7, ll. 16-18). As such, a mobile station is not equivalent to a base station as defined by the present Application itself.

Further, with regard to “base stations,” Chern teaches that the base stations are **fixed**, not mobile. Specifically, Chern teaches that “the position of handset 130 is determined by triangulating a signal from handset 130 with the **fixed locations** of two or more base stations.” (See Chern, Col. 5, ll. 22-25). As such, the “mobile station” of the present Application is not equivalent to the “base station” of Chern. For at least this reason, Appellant asserts that the Examiner’s position is improper, and requests for the present rejection to be withdrawn.

In the Advisory Action of September 13, 2007, the Examiner relied on Martin, as allegedly disclosing the “plurality of mobile stations.” Specifically, the Examiner asserted that the plurality of “mobile stations” correspond to the “base stations” of Martin. This is simply incorrect, as the Examiner has already previously conceded that Martin fails to teach this very same limitation. Specifically, in the Final Office Action of May 4, 2007 the Examiner conceded that **“Martin does not explicitly disclose a plurality of mobile stations.”** (See Office Action, page 7). The Examiner has not explained why Martin now teaches what she has previously indicated was not taught.

Appellant’s representatives contacted the Examiner on September 25, 2007 to clarify the Examiner’s position. During the telephonic conversation of September 25, 2007 the Examiner indicated that she interprets the word “mobile” in “*mobile* stations” as describing the purpose or function of the station. In other words, the Examiner interprets the “mobile stations” as “stations which communicate with mobile devices” rather than, for example, stations which are mobile, capable of being moved, or stations whose location is not fixed. Appellant respectfully submits that a person of ordinary skill in the art would not understand the claimed mobile stations as

being anything other than stations which are capable of being moved, even under the broadest **reasonable** interpretation.

Additionally, with respect to claim 1, Appellant respectfully asserts that Martin and Chern also fail teach or even suggest, at least a “portable information terminal unit adapted to download or upload data from or to said content server **through the plurality of mobile stations**, wherein the **data is divided into a plurality of pieces** and **each** of the plurality of mobile stations **uploads or downloads only a portion** of the plurality of pieces of data.” In other words, according to one exemplary embodiment of the present invention, if data being stored on the server needs to be uploaded to the portable information terminal unit, the chosen data would be divided into a plurality of pieces, and **each mobile station**, making up the plurality of mobile stations, could **only** upload a portion of the plurality of pieces of data. (See, e.g., FIG. 1).

Instead, Chern merely describes splitting up the storage **function** between the server and the mobile handset. Specifically, Chern teaches “the program, or portions of it, could be stored on the server 136 and downloaded to the handset 130 as needed.” (See Col. 13, ll. 15-22; see also, Office Action, page 8). That is, Chern merely discloses storing some of the data on the server and some of the data on the mobile handset. For example, storing the necessary data on the mobile handset, and downloading any additional data from the server as needed. However, in every scenario described by Chern, data would be downloaded or uploaded in a single chunk of data, and all of the data would at some point pass through a single base station.

During the Interview of July 24, 2007, the Examiner took the position that the “information terminal unit [being] adapted to download or upload data from or to said content server through the plurality of mobile stations,” as recited in claim 1, can be interpreted to mean that the information is passed through a plurality of base stations set up in a relay organization, i.e., from the server to one base station, from that base station to the next base station, and so on,

until reaching the mobile handset. Appellant respectfully submits that such a rationale cannot be based on a reasonable interpretation of “mobile stations”.

Under the Examiner’s interpretation of claim 1, **all** of the data being sent from the portable terminal unit to the content server would initially have to be relayed by **a single** mobile terminal, regardless of whether the data would be relayed to another mobile terminal or to a content server. That is, if a plurality of base stations were arranged in a relay organization, as the Examiner suggests, **each station** in the relay organization would receive the **entire** chunk of data being transmitted and then forward that entire chunk of data to the next base station in the relay.

However, as described above, according to one exemplary embodiment of the present invention, once the chosen data is divided into a plurality of pieces, **each mobile station**, making up the plurality of mobile stations, can **only upload a portion** of the plurality of pieces of data. The rest of the data would have to be uploaded by another mobile station, or stations. In other words, **one** mobile station **cannot send all of the data** (i.e. the entire chunk being transmitted), but **at most** can only send **a portion** of the plurality of pieces of data. For at least this reason, Appellant respectfully asserts that the Examiner’s interpretation of claim 1 is impermissibly broad. As such, Appellant respectfully asserts that claim 1 is allowable over the cited art of record.

With regard to independent claims 2-7, Appellant respectfully asserts that claims 2-7 are allowable for at least the reasons analogous to those recited with respect to claim 1.

### ***Conclusion***

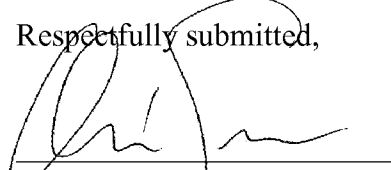
For the reasons set forth above, Appellant respectfully requests that the members of the Board reverse the rejections of the appealed claims and find each of the claims allowable as defining subject matter that is patentable over the cited art of record.

This Appeal Brief is being filed via the USPTO Electronic Filing System (EFS).

Appellant herewith petitions the Director of the USPTO to extend the time for filing this Appeal Brief for an appropriate length of time if necessary.

Appellant does not believe any fee is due under 37 C.F.R. §41.37(a) and 37 U.S.C. § 1.17(c), however if the Examiner believes any fee is due, the USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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CUSTOMER NUMBER

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## **CLAIMS APPENDIX**

### **CLAIMS 1-7 ARE THE CLAIMS ON APPEAL:**

1. A mobile communication system, comprising:

a portable information terminal unit;

a plurality of mobile stations capable of participating simultaneously in communication with said portable information terminal unit;

a packet mobile switching center which is adapted to communicate with said plurality of mobile stations through a radio access network;

a packet mobile gateway switching center which is adapted to communicate with said packet mobile switching center through a mobile data network; and

a content server which is adapted to communicate with said packet mobile gateway switching center through the Internet;

wherein said portable information terminal unit is adapted to download or upload data from or to said content server through the plurality of mobile stations, wherein the data is divided into a plurality of pieces and each of the plurality of mobile stations uploads or downloads only a portion of the plurality of pieces of the data.

2. A mobile communications system comprising:

a portable information terminal unit, wherein:

said portable information terminal unit is adapted to communicate with a plurality of mobile stations,

said plurality of mobile stations are capable of participating simultaneously in communication with a packet mobile switching center through a radio access network,

said packet mobile switching center is adapted to communicate with a packet mobile gateway switching center through a mobile data network,

said mobile gateway switching center is adapted to communicate with a content server through the Internet, and

said portable information terminal unit is adapted to download or upload data from or to said content server through said plurality of mobile stations, wherein the data is divided into a plurality of pieces and each of the plurality of mobile stations uploads or downloads only a portion of the plurality of pieces of the data.

3. A mobile communications system comprising:

a first mobile station, capable of participating simultaneously with at least a second mobile station, in communication with a portable information terminal, wherein:

at least said first and second mobile stations are adapted to communicate with a packet mobile switching center through a radio access network,

said packet mobile switching center is adapted to communicate with a packet mobile gateway switching center through a mobile data network,

said mobile gateway switching center is adapted to communicate with a content server through the Internet, and

said portable information terminal unit is adapted to download or upload data from or to said content server through at least said first and second mobile stations, wherein the data is divided into a plurality of pieces and each of the first and second mobile stations uploads or downloads only a portion of the plurality of pieces of the data.

4. A packet mobile switching center which is adapted to communicate with a plurality of mobile stations through a radio access network, wherein:

said plurality of mobile stations are capable of participating simultaneously in communication with a portable information terminal unit,



said packet mobile switching center is adapted to communicate with a packet mobile gateway switching center through a mobile data network,

said mobile gateway switching center is adapted to communicate with a content server through the Internet, and

said portable information terminal unit is adapted to download or upload data from or to said content server through the plurality of mobile stations, wherein the data is divided into a plurality of pieces and each of the plurality of mobile stations uploads or downloads only a portion of the plurality of pieces of the data.

5. (previously presented): A packet mobile gateway switching center which is adapted to communicate with a packet mobile switching center is adapted to communicate with a plurality of mobile stations through a radio access network,

said plurality of mobile stations are capable of participating simultaneously in communication with an information terminal unit,

said mobile gateway switching center is adapted to communicate with a content server through the Internet, and

said portable information terminal unit is adapted to download or upload data from or to said content server through the plurality of mobile stations, wherein the data is divided into a plurality of pieces and each of the plurality of mobile stations uploads or downloads only a portion of the plurality of pieces of the data.

6. A contents server which is adapted to communicate with a packet mobile gateway switching center through the Internet, wherein:

said packet mobile gateway switching center is adapted to communicate with a packet mobile switching center through a mobile data network,

said packet mobile switching center is adapted to communicate with a plurality of mobile stations through a radio access network,

said plurality of mobile stations are capable of participating simultaneously in communication with a portable information terminal unit, and

said portable information terminal unit data is adapted to download or upload from or to said content server through the plurality of mobile stations, wherein the data is divided into a plurality of pieces and each of the plurality of mobile stations uploads or downloads only a portion of the plurality of pieces of the data.

7. A data transferring method for use with a mobile communication system, said method comprising the steps of causing:

a portable information terminal unit to communicate with a plurality of mobile stations, the mobile stations being capable of participating simultaneously in communication with the portable information terminal unit;

said plurality of mobile stations to communicate with a packet mobile switching center through a radio access network;

said packet mobile switching center to communicate with a packet mobile gateway switching center through a mobile data network;

said packet mobile gateway switching center to communicate with a content server through the Internet; and

said portable information terminal unit to download or upload data from or to said content server through the plurality of mobile stations, wherein the data is divided into a plurality of pieces and each of the plurality of mobile stations uploads or downloads only a portion of the plurality of pieces of the data.

## **EVIDENCE APPENDIX**

NONE

**RELATED PROCEEDINGS APPENDIX**

NONE